

NEEDS ANALYSIS

This section of the Need and Purpose Statement reviews the existing baseline information about the transportation system (as outlined previously) and develops the underlying need (deficiencies), if any, for improvements to the corridor.

SR 9, in and around the City of Greenfield, is classified as a *Regional Corridor* for planning purposes and is functionally classified as both a rural and urban arterial roadway through the study area. To develop the overall project objectives along the corridor, a gap analysis was made between the existing system performance and the required needs of the transportation facility in the context of desired operational performance, conformance with local land use policies, and with perceived local user system functionality.

LEVEL OF SERVICE

Generally, a two lane roadway will begin to exhibit a breakdown in service levels as traffic volumes increase, contingent upon a variety of factors such as access points along the roadway (drives, side streets, etc.), speed, and traffic composition.

The area along SR 9 from McKenzie Road to I-70 is generally displaying acceptable levels of service for both existing and future volumes. This 1 ½ mile stretch of SR 9 currently has four through travel lanes as opposed to the remainder of SR 9 with only two travel lanes.

The area from McKenzie Road to CR 100S (Davis Road), basically in the two lane urban sections of SR 9, roughly within the limits of Greenfield, an increase in traffic, the presence of traffic signals, parking conflicts, and generally substandard geometric conditions are all combining to decrease service levels to unacceptable levels. The residential and commercial growth of rural areas south and north of the city may cause SR 9 to lose operational efficiency as access points into new developments and traffic volumes increase. Passing and turning movements will become more difficult, and speeds will generally decrease. As shown earlier in Table 2, it is anticipated that levels of service will be at the minimum acceptable levels in 2025.

SAFETY

The section of SR 9 within the study area has experienced a safety record, based on accident data, which has been at or worse than the statewide average in recent years. The annual rate of property damage and injury accidents are higher than the

SR 9 Environmental Assessment / Corridor Study

statewide average for similar urban facilities. A number of factors may be contributing to this situation. On the rural portions of the corridor, safety records indicate accident and injury levels near statewide averages.

The Greenfield area experienced fairly rapid population growth through the 1990s. An influx of new development has occurred, and, on a number of accounts, the existing transportation system through the area has not grown at the same rate.

In the urban areas of Greenfield, dated geometrics, such as narrow lanes, substandard turning radii, and lack of turn lanes are contributing to relatively high accident rates. There is a particular frequency pattern of accidents at the intersections of SR 9 and US 40 and SR 9 and McKenzie Road. In the rural areas, north and south of the city, accident rates can also be attributed to recent growth in the area. Specifically, many portions of SR 9 which previously could be traversed at high speeds, are now experiencing varying degrees of roadside development, primarily in the form of residential subdivisions. These developments add entering and existing traffic flows onto the roadway, interrupting high speed traffic flow. Insufficient or lack of such roadway elements such as turn lanes or passing blisters to accommodate this pattern of traffic flow, creates potentially unsafe traveling conditions, increasing the rate of accidents in the area.

LOCAL MOBILITY

The local community, through previous coordination with INDOT and through CAC and public info meetings, as part of this study, has expressed a concern that the use of SR 9 as a through route corridor is adversely affecting their community by drawing truck traffic into the downtown area. More specifically, the community believes this truck traffic is excessive and utilizes SR 9 as a major north-south corridor for trips originating and terminating outside the Greenfield area.

The Greenfield area has three major non-local (city or county jurisdiction) transportation routes which provide local, regional and national accessibility to the area. Two of these roads provide east-west movement, namely I-70 and US 40. SR 9 is the only major north-south roadway in the area. All three are state-jurisdictional facilities.

SR 9 Environmental Assessment / Corridor Study

Since SR 9 through the study area serves as the only major north south roadway, it tends to carry local traffic destined into, out of, or within the Greenfield area. It also serves as a north-south corridor for regional traffic from other primary statewide corridors, such as the aforementioned I-70 to the north of Greenfield or I-74 to the south.

SUMMARY

It is anticipated that the SR 9 corridor from US 52 to SR 234 will experience a decrease in service levels as the City of Greenfield and surrounding area continues to experience growth. Currently, accident rates are higher than the statewide average in the urban area and near the statewide average in the rural areas. The lack of other major north-south corridors serving the area, other than SR 9, is contributing to the existing SR 9 roadway exceeding its capacity.

Improvements along the corridor should attempt to address the following primary issues:

- ***IMPROVE LEVELS OF SERVICE IN BOTH THE RURAL AND URBAN SECTIONS OF THE SR 9 CORRIDOR FOR PROJECTED 2025 TRAFFIC VOLUMES***
 - Improve LOS values to “C” or better in rural areas
 - Improve LOS values to “D” or better in urban areas
- ***IMPROVE SAFETY ALONG THE EXISTING SR 9 CORRIDOR***
 - Reduce predicted property damage, injury, and fatal accident rates along the corridor to below statewide averages

The following secondary issues should be incorporated into the alternative analysis as well:

- ***IMPROVE LOCAL NORTH-SOUTH INTRA-CITY MOBILITY***